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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Toshihiro Maeda

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EXAMINER

WON, MICHAEL YOUNG

ART UNIT

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NOTIFICATION DATE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/743,787	Applicant(s) MAEDA, TOSHIHIRO	
	Examiner MICHAEL Y. WON	Art Unit 2455	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed April 15, 2009.
2. Claims 1, 8, 9, and 15 have been amended and claim 3 has been cancelled.
3. Claims 1, 2, 4-13, and 15 have been examined and are pending with this action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 13 is rejected under 35 U.S.C. 102(e) as being anticipated by Barnard et al. (US 2003/0005097).

As per **claim 13**, Barnard teaches a method for print control, comprising the steps of:

detecting a change in an IP address of a printing device connected to a network (see page 1, [0014]: “changes in printing device addresses... are updated”), and

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after said change in the IP address is detected, searching for said printing device over the network, using information specific to said printing device (see page 1, [0012]: “detecting the printing device by sending a request message to a plurality of network addresses and receiving a response message from the printing device”).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 4-6, 9-12, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard et al. (US 2003/0005097) in view of Katagiri (US 6,389,544).

INDEPENDENT:

As per **claim 1**, Barnard teaches a recording medium recording a print control program causing a computer to execute the steps of:

judging whether the IP address of said printing device has been changed (see page 1, [0014]: “changes in printing device addresses... are updated”);

detecting a change in an IP address of a printing device connected to a network when it is judged that the IP address of said printing device has been changed (see page 1, [0014]: “changes in printing device addresses... are updated”), and

after said change in the IP address is detected, searching for said printing device over the network, using information specific to said printing

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device (see page 1, [0012]: “detecting the printing device by sending a request message to a plurality of network addresses and receiving a response message from the printing device”).

Barnard does not explicitly teach when communications with a target printing device connected to a network fail, judging whether said printing device is powered off.

Katagiri teaches when communications with a target printing device connected to a network fail, judging whether said printing device is powered off (see col.2, lines 56-65).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Gale in view of Barnard so that when communications with a target printing device connected to a network fail, judging whether said printing device is powered off. One would be motivated to do so because judging a factor for failure depends on the failure itself and is subjective.

As per **claim 9**, Barnard teaches a recording medium recording a print control program causing a computer to execute the steps of:

determining whether or not communications with a target printing device, connected to a network and preset to be available for the communications, are available (see page 8, [0072]: “when the identification information, of a print queue is modified, client workstations on the network will no longer be able to send print jobs to the modified print queue until their connections have been updated”),

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judging whether the IP address of said printing device has been changed (see page 1, [0014]: “changes in printing device addresses... are updated”),

determining that the communications with said target printing device are unavailable because of a change in IP address (inherency), transmitting a command (see page 2, [0035]: “input configuration information and other commands and instructions”) for obtaining information specific to said printing device on the network to search for said printing device (see page 3, [0042]: “Discovery module 84 is a module which is used to perform discovery on detected printing devices on network 10 so as to obtain information regarding a printing device’s network setting”), and

identifying an IP address of said printing device based on the information specific to said printing device included in a response to said command (see page 6, [0055]: “identify all network devices connected to the network and assigned IP address”).

Barnard does not explicitly teach judging whether said printing device is powered off.

Katagiri teaches judging whether said printing device is powered off (see col.2, lines 56-65).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Gale in view of Barnard by implementing judging whether said printing device is powered off. One would be motivated to do so because judging a factor for failure depends on the failure itself and is subjective.

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As per **claim 15**, Barnard teaches a method for print control, comprising the steps of:

determining whether or not communications with a printing device, connected to a network and preset to be available for the communications, are available (see page 8, [0072]: “when the identification information, of a print queue is modified, client workstations on the network will no longer be able to send print jobs to the modified print queue until their connections have been updated”),

judging whether the IP address of said printing device has been changed (see page 1, [0014]: “changes in printing device addresses... are updated”),

when it is determined that the communications with said printing device are unavailable because of a change in IP address (inherency), transmitting a command (see page 2, [0035]: “input configuration information and other commands and instructions”) for obtaining information specific to said printing device on the network to search for said printing device (see page 3, [0042]: “Discovery module 84 is a module which is used to perform discovery on detected printing devices on network 10 so as to obtain information regarding a printing device’s network setting”), and

identifying an IP address of said printing device based on the information specific to said printing device included in a response to said command (see page 6, [0055]: “identify all network devices connected to the network and assigned IP address”).

Barnard does not explicitly teach judging whether said printing device is powered off.

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Katagiri teaches judging whether said printing device is powered off (see col.2, lines 56-65).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Gale in view of Barnard by implementing judging whether said printing device is powered off. One would be motivated to do so because judging a factor for failure depends on the failure itself and is subjective.

DEPENDENT:

As per **claim 2**, which depends on claim 1, Barnard further teaches wherein the information specific to said printing device is information of said printing device other than a MAC address, and includes at least one of a name, a specific ID, a former IP address (see page 7, [0067]: “previous IP address”), and a network port number of said printing device.

As per **claim 4**, which depends on claim 1, Barnard further teaches wherein the searching step includes the step of conducting a search by broadcasting when there is no DHCP server on the network (see page 5, [0048]: “DHCP server 75 is disabled to prevent addressing conflicts and discovery module 84 conducts classic discovery... include, but not limited to, known techniques such as using broadcast discovery messages”).

As per **claim 5**, which depends on claim 1, Barnard teaches further causing the computer to execute the step of notifying another device on the network of new information about said printing device when said printing device has been found in the

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searching step (see page 8, [0073]: “print queue service module 83 identifies client workstations connected to network...”).

As per **claim 6**, which depends on claim 5, Barnard teaches further causing the computer to execute the step of providing the notice again when the notifying step fails (see page 9, claim 13: “published to the network according to a set of predetermined rules”).

As per **claim 10**, which depends on claim 9, Barnard further teaches wherein setting for the communications with said printing device is updated with said identified IP address (see page 1, [0014]: “changes in printing device addresses... are updated”).

As per **claim 11**, which depends on claim 9, Barnard further teaches wherein information specific to said printing device stored in a memory is updated with the obtained information specific to said printing device (see page 1, [0014]: “changes in printing device addresses... are updated”).

As per **claim 12**, which depends on claim 9, Barnard further teaches wherein said command is transmitted when it is determined that there is no DHCP server on the network (see page 5, [0048]: “DHCP server 75 is disabled to prevent addressing conflicts and discovery module 84 conducts classic discovery... include, but not limited to, known techniques such as using broadcast discovery messages”).

As per **claim 16**, which depends on claim 1, Barnard further teaches wherein the computer that executes the program steps is configured to initiate print commands (see page 10, claim 26)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard et al. (US 2003/0005097).

As per **claim 8**, Barnard teaches a printing device, comprising:

a detector detecting a change in an IP address (see page 1, [0014]: “changes in printing device addresses... are updated”),

a recorder recording a past IP address as specific information when said change in the IP address has been made (see page 1, [0014]: “changes in printing device addresses... are updated” and page 3, [0037]: “one or more device management directories which is used to store network identification and configuration information for each printing device”), and

a responder retrieving said recorded past IP address upon an inquiry from an external device and making a response (see page 1, [0012]: “detecting the printing device by sending a request message to a plurality of network addresses and receiving a response message from the printing device located at one of the network addresses”).

Barnard does not explicitly teach the past IP address being stored concurrently with a new IP address; however these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. Address

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information will be stored regardless of the data. Thus this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to store any information because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard et al. (US 2003/0005097) and Katagiri (US 6,389,544), and still further in view of Machida (US 6,195,514).

As per **claim 7**, which depends on claim 1, Barnard and Katagiri do not explicitly teach further causing the computer to execute the step of automatically updating printer port setting based on information obtained by performing the searching step or new information about said printing device transmitted from another device.

Machida teaches automatically updating printer port setting based on information obtained by performing the searching step or new information about said printing device transmitted from another device (see col.19, lines 35-37).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Barnard and Katagiri in view of Machida so that the step of automatically updating printer port setting based on information obtained

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by performing the searching step or new information about said printing device transmitted from another device is executed. One would be motivated to do so because Barnard teaches that of updating connection information (see page 8, [0072]).

Response to Arguments

8. Applicant's arguments with respect to claim 3, now incorporated into independent claims 1, 9, and 15 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to claim 8 are moot in view of the new ground(s) of rejection.

Conclusion

9. For the reasons above, claims 1, 2, 4-13, and 15 have been examined and remain pending.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL Y. WON whose telephone number is (571)272-3993. The examiner can normally be reached on M-Th: 10AM-8PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Won/

Primary Examiner

June 1, 2009